

COVID-19 AND THE COMMERCIAL BANKING SECTOR IN PAKISTAN AN ALTERNATIVE WAY FORWARD

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Abstract

The paper aims to investigate the impact of Covid-19 on the Financial Performance of Commercial banks operating in Pakistan. Panel data set has been utilized for this purpose. Using panel random effect regression the results reveal that tangible assets and size both have significant impact on performance, the former impact is negative while the latter impact is positive on performance. However, the impact of both Covid-19 and leverage have not statistically significant impact on performance of the commercial banks. The study also compares the results with those reporting in Rehman et al. (2025). The results for firms size is similar for both banking system i-t it positively impact performance. While tangible assets is negative and statistically significant only in case of converntional banks. The study main variable of interest i-e Covid-19 has positive impact on Islamic banks whiles it impact in case of commercial banks is not significant. These difference might be due to the structural and the way they operate and how they respond to various factors (internal and external). These findings have implications for both the policy makers and academicians.

INTRODUCTION

The fatal and most dangerous Covid-19 pandemic has adversely affected the national economy (Omar et al., 2020) at one hand and on the other hand it has brought a serious challenge for businesses across the globe. Various measures such lockdown, smart lock down, social distances and reduction in the availability of key inputs have brought many industries and businesses to the verge of collapse. (Monica et al., 2021). However, the availability of essential food items and various medicine and lifesaving drugs were ensured (Sharma et al., 2020). However, the impact of this catastrophe on the real sector and financial sector of the economy has largely been overlooked in the literature. Mansour et al. (2021) for example argue that financial markets

were quickly affected by the global economic recession brought on by government policies. This highlights that financial institutions are particularly vulnerable during economic downturns because nonperforming loans are more likely to occur (Foglia et al., 2020). Financial Institutions are concerned about a higher threat of fallout in almost every country as the epidemic reduces the cumulative demand, production, commerce, and economic transactions to minimal levels and joblessness rises in the absence of government support (IMF, 2020). While quite a bit of attention has been given to how the COVID-19 pandemic affected areas like social well-being, household income, food security, and even the beverage industry (reference), there's surprisingly little

research on its impact on the financial sector—especially banks. For instance, Rehman et al. (2025) looked into how Islamic banks responded to the pandemic but didn't find much evidence of any major effect on their financial performance. A few scholars have pointed out the need for more studies in this area to fully grasp the situation (see, for example, Rehman et al., 2025). In light of that, this study sets out to explore how conventional banks in Pakistan were affected financially during the pandemic. To offer a more complete picture, the results will also be compared with those of Rehman et al. (2025), which focused on Islamic banks in the country

2. Literature Review

History has seen many financial crises (such as Great Depression, Asian Financial Crisis, global financial crisis etc). Extensive effort were undertaken to explore the underlying causes of these crises (see for example, (Carmassi et al., 2009; Murphy, 2008). While others have documented the impact of financial crisis on the real sector of the economy (Akbar et al., 2017; Akbar et al., 2013; Rehman & Rehman, 2014). Unlike financial crisis, the Covid-19 is a health pandemic, which was declared by the WHO as global health pandemic. The severity of this health pandemic can be seen from the fact that its impact is felt on every sector of the economy (Elliott, 2020; Richard Sam Dickson, 2020). Consequently, it has attracted the attention of academicians and policy makers. A significant number of researchers have focused on documenting the impact of Covid-19 on various sectors of the economy. Richard Sam Dickson (2020) for example documented the negative impact of Covid-19 on investment in Ghana. The investor confidence and stock markets are also badly affected by the global health pandemic (Hassan et al. (2021); Kinatender et al. (2021); Adrian et al. (2019); Rephael et al. (2017). Others have document the adverse impact of Covid-19 on Fisheries sector (Md Shamsuddin et al., 2023), global banking industries (Ozili & Arun, 2020), performance of banks (Ben Abdallah and Bahloul's, 2024). However, studies on the impact of covid-19 on the financial sector, especially the banking sector, are very rare. Further, the impact of global health

pandemic on the performance of commercial banks operating in Pakistan remains unexplored. Rehman et al. (2025) for example, examined the behavior of Islamic banks performance during Covid-19. Nevertheless, the study Rehman et al. (2025) has focused only on Islamic banks while the results obtained from the study are not generalizable to commercial banks as there are differences in the way both banks operate. Further, some authors have called for more research on this issue to better understand it (Rehman et al., 2025). Therefore, the impact of Covid-19 on the performance of commercial banks is an area that warrant further research. This study therefore addresses these gaps in the existing literature by focusing on the impact of Covid-19 on the performance of commercial banks operating in Pakistan.

3. Research Methodology

To achieve the objectives of the study, the positivism approach and quantitative analysis is utilized. All conventional banks operating in Pakistan for the time period 2017-2022 are the population of the study. Consistent with the previous studies, banks must meet non-missing data requirements to be included in the sample. The total sample of the conventional banks thus includes 16 banks. Further, following the existing studies (Akbar et al., 2017; Akbar et al., 2013; Rehman, 2010; Rehman & Rehman, 2009; Rehman et al., 2025; Rehman & Khan, 2015; Rehman et al., 2017; Rehman et al., 2023; Rehman & Rehman, 2011, 2014; Rehman et al., 2015) the following model is used as our bench mark model

$$Y_{it} = \alpha + \beta_1 (\text{firm level factors})_{it} + \beta_2 (C-19)_{it} + \mu_{it} \dots \dots (A)$$

Y_{it} is our dependent variable i.e ROA which will be regressed against the firm level factors and covid-19. β_1 it is firm level factor such as size (SZ) of the firms, leverage (Lev), tangible assets (PPE) while C-19 is Covid-19 and is our main variable of interest. It is a dummy variable and will take 1 for the covid-19 period (2019-2020) and 0 otherwise. Therefore, getting insights from the existing literature the study has used the following panel regression model

$$ROA_{it} = \alpha + \beta_1 PPE_{it} + \beta_2 Lev_{it} + \beta_3 SZ_{it} + \beta_4 C-19_{it} + \mu_{it} \dots \dots (1)$$

4. Results and Analysis

The study has used panel data set. Therefore, it is imperative to check which effect (such as fixed Hausman Model test is reported in table 01 below

or random) is appropriate in the study. For this purpose the Hausman Model test is run for checking the appropriateness of the fixed or random effects in this study. The result of the

Table1 Hausman Model Test

	Coef.
Chi-square test value	1.33
P-value	.85

Results reported in Table 1 suggests that $p > 0.05$. Hence the results fail to reject the random effect. Based on the Hausman test

result the study used random effect which is the best in the study case. The study runs the random effect model and the result is reported in table 2 below

Table 2 Random Effect Regression Model

ROA	Coef.	St.Err.	t-value	p-value	Sig
PPE	-1.038	.345	-3.01	.003	***
SZ	1.989	.422	4.72	0	***
Lev	-.017	.019	-0.86	.391	
C-19	.019	.206	0.09	.927	
Constant	-16.332	3.359	-4.86	0	***
Overall r-squared	0.505		Number of obs	96	
Chi-square	26.805		Prob > chi2	0.000	

*** $p < .01$, ** $p < .05$, * $p < .1$

The result of the regression model 1 is reported in Table 2. The R-square is 50 percent while the Chi-square test is statistically significant at the level of 1% which suggests that overall model is statically significant. The coefficient of PPE is negative and significant at the level of 1%. The negative coefficient and statistical significance show that tangible assets have a negative impact on the performance of conventional banks. This implies that one unit increase in tangible assets weakens the firm's performance (approximately 1.038). The negative coefficient implies that the more tangible assets the firms have, the weaker the performance would be. This result is consistent with the existing studies such as Rehman et al. (2025) who also found

negative relationship between tangible assets and ROA for Islamic banks. SZ has a positive and statistically significant impact on the performance of conventional banks. This result is statistically significant at the level of 1% which implies that large firms tend to have better performance. The positive coefficient implies that one unit increase in

firm SZ improve the firm's performance (approximately 1.989). This is consistent with the existing studies (Rehman et al., 2025).

The results reported in table 2 suggest that leverage has negative and insignificant result. It seems that leverage has no statistically significant result. This result is consistent with the existing literature (Arora & Sharma, 2016; Bansal & Sharma, 2016); Sheikh et al. 2013; and Darko et al., 2016). The C-19 has

positive coefficient. However, the result is statistically not significant. Consequently, robust conclusion cannot be drawn. The study also re-run the random effect regression model with robust standard error to account for the heteroscedasticity and serial correlation issues, to save the space, the result is not reported however, the result is qualitatively similar to the results reported in table 02 above.

The study also compares the results with those of Rehman et al. (2025), who conducted research on Islamic banks operating in Pakistan. For comparison purposes, we have reproduced Table 2 from their study here, extracting the relevant regression results.

"Table 3 Fixed Effect Regression Model for Islamic Banks

ROA	Coef.	St.Err.	t-value	p-value	Sig
Size	.664	.192	3.45	.001	***
Tassets	-.143	.112	-1.28	.204	
Leverage	.01	.012	0.81	.421	
COVID19	.247	.11	2.25	.027	**
Constant	-5.905	1.689	-3.50	.001	***
R-squared	0.233		Number of obs	114	
F-test	6.917		Prob > F	0.000	
Akaike crit. (AIC)	149.766		Bayesian crit. (BIC)	163.447	

*** $p < .01$, ** $p < .05$, * $p < .1$. this table is taken from Rehman et al. (2025) p.773

Our result for size is consistent with the result of Size reported in Rehman et al. (2025) indicating that large firms have better performance. It implies that as the size of banks (i.e. Islamic and conventional banks) increases, their performance also increases. The coefficient of tangible assets of both banks has negative effects however, it is statistically significant in case of conventional banks. The impact of leverage on ROA is statistically insignificant for both banks, reflecting no statistical impact on performance of banks. We find that Covid-19 has no statistically significant impact on performance of conventional banks however, the results reported in Rehman et al. (2025) reveals that coefficient of Covid-19 is positive and statistically significant at the level of 5% which means that covid-19 has enhances the performance of Islamic banks.

Conclusions

The study employed a panel data approach and based on the Hausman test, adopted a random effects model to analyze the impact

of various factors on the performance of conventional banks. The regression results indicate that tangible assets have a significant negative effect on performance, while firm size positively influences performance at a

1% significance level. Leverage and COVID-19 effects were found to be statistically insignificant. A comparison with Rehman et al. (2025) reveals consistency in the positive relationship between size and performance across both conventional and Islamic banks. However, the negative impact of tangible assets is statistically significant only for conventional banks. While leverage remains insignificant for both types of banks, COVID-19 appears to have had a positive and significant effect on the performance of Islamic banks, contrasting with its negligible impact on conventional banks. These findings suggest structural and strategic differences in how Islamic and conventional banks respond to external shocks and manage their assets. Further research is required to gain a deeper understanding of these issues

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